

REMARKS

The Office Action dated December 20, 2004, has been received and carefully noted. The above amendment to the specification, and the following remarks, are submitted as a full and complete response thereto. The sole claim pending in the application is claim 5 and is again submitted for consideration.

The Office Action objected to the specification because it was alleged that the recitation of "NA," at page 4, line 20, is not defined. Applicants note that "NA" is later defined in the specification, but this initial recitation is not defined. As such, Applicants have amended the recitation to spell out that NA stands for "Numerical Aperture." Reconsideration and withdrawal the objection are respectfully requested.

Claim 5 is the only claim pending in the instant application. Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Hayashi* (U.S. Patent No. 6,392,683) in view of *Physics by Tipler*. Applicants respectfully traverse the rejection on the grounds that *Hayashi* cannot be applied as prior art against the instant application.

Hayashi issued as a patent on May 21, 2002 and is based on an application having a filing date of September 23, 1998. Applicants note that inventor of the *Hayashi* patent is the same as one of the co-inventors of the instant application and both the *Hayashi* patent and the instant application have been assigned to Sumitomo Heavy Industries Ltd. The instant application is a divisional of U.S. application 09/940,604, filed on August 29, 2001 and the instant application has the same effective filing date. Thus, *Hayashi* cannot be applied as prior art against the instant application under 35 U.S.C. §102(a) or (b).

Given the filing date of September 23, 1998 of *Hayashi*, the Office may be attempting to apply the *Hayashi* patent under 35 U.S.C. §102(e), but the rejection cannot be made under 35 U.S.C. §103 since both the *Hayashi* patent and the instant application were assigned to the same entity at the time the invention was made, per 35 U.S.C. §103(c). As such, Applicants respectfully traverse the rejection as being improper since *Hayashi* cannot be applied as prior art against the instant application. Reconsideration and withdrawal the rejection are respectfully requested.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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